- The resin cultivating base of claim 1, wherein a resin cultivating base including both the low and high density portions in a unit base is positioned on a resin cultivating base including the high density portion.
- The resin cultivating base of claim 1, wherein the resin cultivating base on the waterway is covered by a vinyl house.
- The resin cultivating base of claim 10, wherein open ends of the hollow space formed in hollow synthetic resin woods are closed by caps, or the hollow space is filled with foamed styrene having a high buoyancy.
- The resin cultivating base of claim 10, wherein holes are made at four corners of each high density portion and a plurality of resin cultivating bases are coupled using fixtures of bolts and nuts fitted in the holes and the fixtures are fixedly connected to the frame.
- 18. The resin cultivating base of claim 1, wherein a plurality of stacked resin cultivating bases having low and high density portions oriented in one direction are alternately arranged with the directions alternately crossed.
- 19. The resin cultivating base of claim 1, wherein pipes generating bubbles are provided in a water flow space for the purpose of ventilating the water flow space.

REMARKS

Applicant is submitting herewith Figures 9, 10, 15, 16 and 17 with proposed changes shown in red. If the proposed

X

changes are acceptable to the Examiner, new formal figures will be submitted.

In the aforementioned Office Action, the Examiner objected to the specification in view of the fact that the disclosure of roots are designated as 71 whereas the roots are shown as 72 in the drawings. In the proposed changes to the drawings, applicant has changed 72 to 71 which should obviate any need to make changes to the specification.

Applicant has also rewritten claims 4, 6-8, 10-11, 13, and 15-19. In rewriting the claims applicant has deleted the term "any one of claims". With respect to claims 16 and 17, "any one of claims 10" was changed to "claim 10".

Further, applicant has rewritten claims 11, 16 and 17 to provide proper antecedent basis for the synthetic resin woods.

Applicant has also deleted the word "preferably" as suggested by the Examiner. Further, the term "such as" has been deleted from claim 17.

A marked-up copy of the claims is enclosed herewith as Appendix A. Applicant has also made several minor grammatical corrections, as for example to change "base" to --bases-- and "are" to --is-- as shown in Appendix A which is attached hereto.

Accordingly, it is applicant's contention that the Examiner's objections and the rejection under §112 have been



overcome and that the case is now in proper form for allowance. Prompt favorable action is therefore requested.

Respectfully submitted,

February 11, 2002

Date

By:

David E. Dougherty

Reg. No. 19,576

David E. Dougherty One Skyline Place, Suite 1404 5205 Leesburg Pike Falls Church, VA 22041

Telephone: 703-845-0758 Facsimile: 703-575-2707



APPENDIX A

A resin cultivating base serving as seedling beds for vegetation and partially immersed in a river, lake, marsh, ponds, or waterway drawing water from them,

wherein the resin cultivating base is a threedimensional structure constituted by long and/or short filaments of thermoplastic resin;

adjacent long and short filaments are curled or looped at random, and contacted, entwined and gathered, thereby forming a low density portion and a high density portion;

the low density portion has 80% to 99% voids which is higher void rate than the void rate of the high density portion;

and vegetation is planted on the low density portion.

- The resin cultivating base of claim 1, wherein the resin cultivating base is provided with recesses thereon for planting vegetation.
- The resin cultivating base of claim 1, includes spaces free from filaments, the spaces opening on a peripheral area thereof.
- (Amended) A water purifying device comprising a resin cultivating base of [any of claims] claim 1, wherein the resin cultivating base planted with aquatic vegetation and land vegetation thereon is installed in the waterway to be purified.
- The water purifying device of claim 4, comprising a plurality of resin cultivating [base] bases coupled with one RECEIVED
 FEB 1 2 2002
 TC 1700 another.



6. (Amended) A water purifying method comprising the steps of;

planting vegetation on the resin cultivating base of [any one of claims] claim 1;

installing the resin cultivating base in a waterway to be purified; growing the vegetation and allowing the vegetation to suck water pollutants; forming seedling beds for microorganisms using filaments of the resin cultivating base and roots of vegetation growing therein; and allowing microorganisms to decompose water pollutants in the water.

- 7. (Amended) The resin cultivating base of [any one of claims] claim 1, including the low density portion and the high density portion in a unit base.
- 8. (Amended) The resin cultivating base of [any one of claims] claim 1, wherein the low density portion and the high density portion are separately manufactured; the low density portion is positioned on the high density portion for the purpose of making a multi-tier structure; and the multi-tier structure is placed in the waterway with a water flow space maintained between the high density portion and a bed of the waterway.
- 9. The method of claim 6, wherein a plurality are juxtaposed, and the purified water is returned to the waterways.
- 10. (Amended) The resin cultivating base of [any one of claims] claim 1, wherein a frame made of hollow synthetic resin woods is fixedly connected to four corners of the high density portion near a border between the low density portion and the high density portion, or to four corners of the high density portion near the surface of the water.



- 11. (Amended) The resin cultivating base of [any one of claims 1] claim 10, wherein the frame of hollow synthetic resin woods [are] is assembled in the shape of a square frame on a bed of the waterway, and the resin cultivating base including the low and high density portions is fitted into the frame.
- 12. The resin cultivating base of claim 3, wherein the spaces free from the filaments are used for enabling posts, which are made of synthetic resin woods and stand upright on the bed of the waterway, to pass through, for the purpose of fixing the resin cultivating base.
- 13. (Amended) The resin cultivating base of [any one of claims] <u>claim</u> 1, wherein a plurality of resin cultivating base including the low and high density portions in a unit base are stacked up to form a multi-tier structure.
- 14. (Amended) The resin cultivating base of [any one of claims] claim 1, wherein a resin cultivating base including both the low and high density portions in a unit base is positioned on a resin cultivating base including the high density portion.
- 15. (Amended) The resin cultivating base of [any one of claims] <u>claim</u> 1, wherein the resin cultivating base on the waterway is covered by a vinyl house.
- 16. (Amended) The resin cultivating base of [any one of claims] claim 10, wherein open ends of the hollow space formed in hollow synthetic resin woods are closed by caps, or [preferably] the hollow space [are] is filled with foamed styrene having a high buoyancy.
- 17. (Amended) The resin cultivating base of [any one of claims] claim 10, wherein holes are made at four corners of



each high density portion and a plurality of resin cultivating [base] <u>bases</u> are coupled using fixtures [such as] <u>of</u> bolts and nuts fitted in the holes and the fixtures are fixedly connected to the frame.

- 18. (Amended) The resin cultivating base of [any one of claims] claim 1, wherein a plurality of stacked resin cultivating [base] bases having low and high density portions oriented in one direction are alternately arranged with the directions alternately crossed.
- 19. (Amended) The resin cultivating base of [any one of claims] claim 1, wherein pipes generating bubbles are provided in a water flow space for the purpose of ventilating the water flow space.

FIG. 8

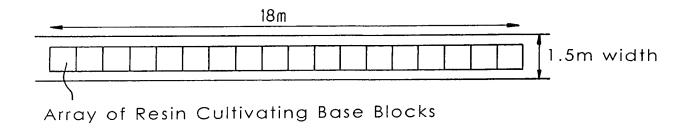


FIG. 9

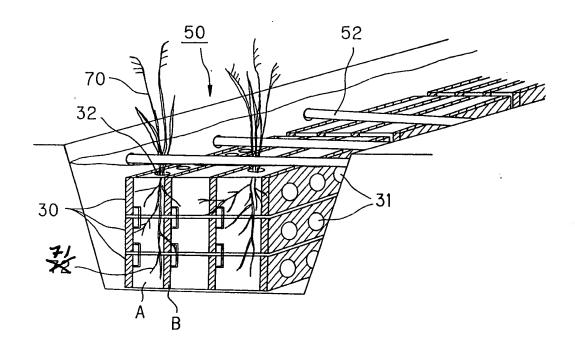
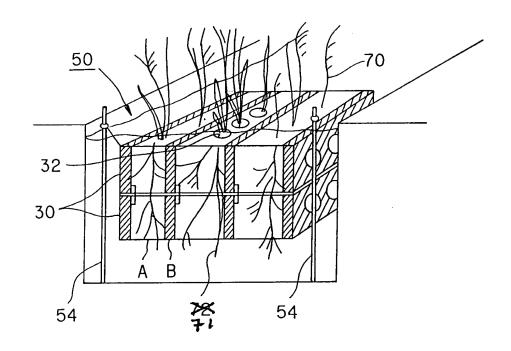




FIG. 10



X

FIG. 15 PRIOR ART

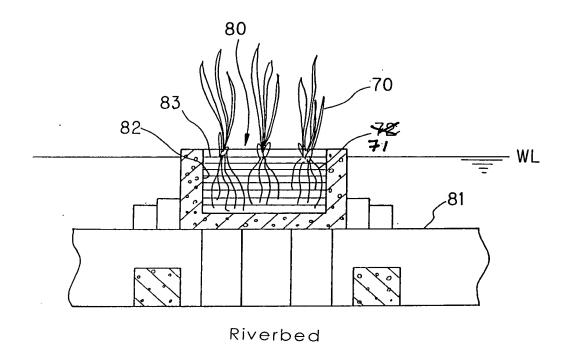


FIG. 16 PRION ART

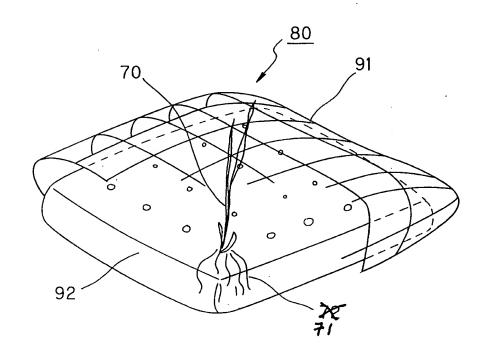


FIG. 17
PRIOR ART

